

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

IN THE MATTER OF:)	Docket No. I&SE 02/03-024
)	
City of Lodi Central Plume Area)	IMMINENT AND SUBSTANTIAL
)	ENDANGERMENT
)	DETERMINATION AND ORDER
RESPONDENTS:)	AND REMEDIAL ACTION
)	ORDER
Guild Cleaners, Inc.)	
c/o Mr. Jack Alquist)	Health and Safety Code
Registered Agent)	Sections 25355.5(a)(1)(B),
17 Church Street)	25358.3(a), 58009 and 58010
Lodi, CA 95241-1910)	
)	
Estate of Dwight Alquist)	
c/o Insurance Company of North America)	
Attn: James Perry, Registered Agent)	
21860 Burbank Blvd., Suite 200)	
Woodland Hills, CA 91367)	
)	
Odd Fellows Hall Association of Lodi)	
218 W. Pine Street)	
Lodi, CA 95240)	
)	
Lodi News Sentinel, Inc.)	
c/o Mr. Fred Weybret)	
Registered Agent)	
125 N. Church Street)	
Lodi, CA 95240)	
)	
Beckman and Company)	
c/o Mr. Millard W. Beckman, President)	
404 W. Pine Street)	
Lodi, CA 95241)	
)	
Mrs. Angelina Comporato)	
1301 S. Church Street)	
Lodi, California 95240-5715)	

Beckman Capitol Corporation)
c/o Mr. Millard W. Beckman, President)
404 W. Pine Street)
Lodi, California 95241)
)
Farmers and Merchants Bank)
116 W. Pine Street)
P. O. Box 3000)
Lodi, California 95241)

I. INTRODUCTION

1.1 Parties. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) issues this Imminent and Substantial Endangerment Determination and Order and Remedial Action Order (Order) to Guild Cleaners, Inc.; the Estate of Dwight Alquist; Lodi News Sentinel, Inc.; Odd Fellows Hall Association of Lodi; Beckman and Company; Beckman Capitol Corporation; Mrs. Angelina Comparato; and Farmers and Merchants Bank (collectively Respondents).

1.2 Property/Site. The City of Lodi Central Plume Area (LCPA) is located within the City of Lodi, California, County of San Joaquin, and is approximately defined by Elm Street to the north, Tokay Street to the south, Sacramento Street to the east, and Hutchings Street to the west. A map showing the LCPA is attached to this Order as Exhibit A. Five (5) identified properties that are reported to have contributed contamination to the soil and groundwater are within the LCPA. The five identified properties included in the LCPA are identified by location address and Assessor's Parcel Numbers (APN) as follows: 1) 17 S. Church Street (APN 04303206); 2) 218 W. Pine Street (APN 04303202); 3) 212 W. Pine Street in Lodi (APN 04303203); 4) 408 S. School Street (APN 04520121); 5) 116 W. Pine Street (APN 04303403) in San Joaquin County, California. This Order applies to the LCPA and the areal extent of contamination in groundwater, soil and air, including indoor air due to vapor intrusion that resulted from activities in the LCPA (hereinafter, the "Site").

1.3 Jurisdiction. This Order is issued by DTSC to Respondents pursuant to its authority under Health and Safety Code sections 25358.3, subdivision (a), 25355.5, subdivision (a)(1)(B), 58009 and 58010.

Health and Safety Code section 25358.3, subdivision (a) authorizes DTSC to take various actions, including issuance of an Imminent or Substantial Endangerment Determination and Order, when DTSC determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of a hazardous substance.

Health and Safety Code section 25355.5, subdivision (a)(1)(B) authorizes DTSC to issue an order establishing a schedule for removing or remedying a release of a hazardous substance at a site, or for correcting the conditions that threaten the release of a hazardous substance. The order may include, but is not limited to requiring specific dates by which the nature and extent of a release shall be determined and the site adequately characterized, a remedial action plan prepared and submitted to DTSC for approval, and a removal or remedial action completed.

Health and Safety Code section 58009 authorizes DTSC to commence and maintain all proper and necessary actions and proceedings to enforce its rules and regulations; to enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health; to compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction; and/or on matters within its jurisdiction, to protect and preserve the public health.

Health and Safety Code section 58010 authorizes DTSC to abate public nuisances related to matters within its jurisdiction.

II. FINDINGS OF FACT

DTSC hereby finds:

2.1 Liability of Respondents. Each of the Respondents is a responsible party or liable person as defined in Health and Safety Code section 25323.5. Investigations conducted between 1989 and 2002 indicate that contamination at the Site occurred through direct release of hazardous substances either to the subsurface or to the sanitary or industrial sewer system. In 1989, the City of Lodi first detected tetrachloroethylene (PCE) contamination and trichloroethylene (TCE) in water samples collected from municipal water supply wells at concentrations above California's Maximum Contaminant Levels (MCLs) of 5 micrograms per liter (ug/L). In March 1996, the Northeast Research Institute, L.L.C. (NERI) published its Final Summary Report, Potential Responsible Parties Search and Sources Investigations, Lodi Groundwater Site, prepared on behalf of DTSC (the NERI Report). The NERI Report identified at least five (5) locations that could be sources of contamination in the LCPA.

2.1.1 Guild Cleaners, Inc. (Guild) is the current property owner of 17 S. Church Street where Guild Cleaners operates. Guild has operated as an active dry cleaning facility on the property since 1959. PCE was used as a solvent in dry cleaning operations there from 1959 until 1999. Guild released PCE to the City's sanitary sewer system through 1995. During the Regional Water Quality Control Board (RWQCB) investigative work conducted in September of 1989, ambient and flush sewer samples collected from sewer manholes downstream of 17 S. Church Street indicated the presence of TCE and PCE. In

December of 1989 and January of 1990, the RWQCB conducted passive soil gas sampling and detected up to 240,000 PCE ion counts in the vicinity of 17 S. Church Street. In October of 1993, DTSC initiated a focused remedial investigation of the source of the PCE contamination found in Lodi municipal supply well number 3 which is located 3 blocks down gradient from Guild. Elevated levels of PCE in groundwater samples taken down gradient from Guild were reported at concentrations ranging from 8.2 to 2,300 ug/L in a 1994 investigation report prepared for DTSC by URS Consultants, Inc. (URS). The NERI Report identified Guild as a confirmed source of solvent contamination. During the NERI investigation of the sewer lateral adjacent to and down gradient from Guild, PCE and TCE concentrations up to 270 and 190 ug/L respectively were detected.

Additional investigations near the Guild facility included wastewater sampling by the City of Lodi and soil gas sampling conducted by Guild's consultant WZI between 1996 and 1997. The City of Lodi reported that on five different occasions Guild violated the City's PCE wastewater discharge limits of 5 ug/L. WZI reported in November 1996 that PCE and TCE were present in shallow soil gas at concentrations of 2,895 ug/L and 7.6 ug/L respectively. The Initial Site Investigation Report on investigations conducted from May 2000 through June 2001 by Henshaw Associates, Inc. (Henshaw) for the City of Lodi (Henshaw Investigation) reported that Guild is a significant source of soil and groundwater contamination either through direct release to the subsurface or to the sanitary sewer system. During the Henshaw Investigation, PCE in soil gas and groundwater was detected in the vicinity of Guild at concentrations of 7,600 ug/L and 74,000 ug/L respectively. Soil gas investigation results reported by Levine Fricke on behalf of Guild in October 2002 showed PCE concentrations as high as 11,000 ug/L in samples taken on the Guild property

2.1.2 Odd Fellows Hall Association of Lodi (Odd Fellows) is the current owner of 218 W. Pine Street, the property where the former R & J Cleaners (R & J) and the former Flair Cleaners (Flair) conducted operations. R & J operated at this location from approximately 1951 until 1956. Flair operated at this location from approximately 1957 until 1973. The 1996 NERI Report identified 218 W. Pine Street as a possible source of contamination in the LCPA. In the NERI Report, PCE and TCE ion counts greater than 1,000,000 and 1,000 respectively were detected in soil gas samples in the immediate vicinity of 218 W. Pine Street. NERI also reported that ambient sewer samples taken immediately south of 218 W. Pine Street detected TCE and PCE at 79 and 270 parts per billion (ppb) respectively. A flush sewer sample detected TCE at 190 ug/L. A URS report prepared for DTSC in 1994 included soil gas sampling results which showed detections of greater than 100,000 PCE ion counts in the vicinity of 218 W. Pine Street. Soil gas investigation results reported in October 2002 by Levine Fricke, a consultant for Guild, showed PCE concentrations as high as 29,000 ug/L in samples taken at 218 W. Pine Street.

2.1.3 The Estate of Dwight Alquist is the former owner and operator of Flair. Flair was located at 218 W. Pine Street, the property that is currently owned by the Odd Fellows. Flair operated at 218 W. Pine Street from approximately 1950 until 1973. Flair's dry

cleaning process likely included the use of PCE or TCE. Flair discharged wastewater to the sanitary sewer system. The NERI Report identified Flair as a possible source of contamination at 218 W. Pine Street. In the NERI Report PCE and TCE ion counts greater than 1,000,000 and 1,000 respectively were detected in soil gas samples in the immediate vicinity of 218 W. Pine Street. NERI also reported that ambient sewer samples taken immediately south of 218 W. Pine Street detected TCE and PCE at 79 and 270 ppb respectively. A flush sample detected TCE at 190 ug/L. A URS report prepared for DTSC in 1994 included soil gas sampling results which showed detections of greater than 100,000 PCE ion counts in the vicinity of 218 W. Pine Street. Soil gas investigation results reported by Levine Fricke on behalf of Guild in October 2002 showed PCE concentrations as high as 29,000 ug/L in samples taken at 218 W. Pine Street.

2.1.4 Beckman Capitol Corporation (Beckman) is the current owner of 212 W. Pine Street, the property on which the Lodi News Sentinel, Inc. conducted operations from 1945 to 1968. An environmental soil gas investigation at 212 W. Pine Street conducted on behalf of the City of Lodi in 1996 by Kennedy /Jenks Consultants detected concentrations of PCE in soil gas samples ranging from 1 ug/L to more than 53,000 ug/L. TCE, 1,1,1-Trichloroethane (1,1,1-TCA), chloroform, and cis-1,2-dichloroethylene were also detected in soil gas samples at 212 W. Pine Street. Soil gas investigation results reported in October 2002 by Levine Fricke, consultant for Guild, showed PCE concentrations as high as 49,000 ug/L in samples taken at 212 W. Pine Street.

2.1.5 Beckman and Company is a former owner of 212 W. Pine Street, the property on which the Lodi News Sentinel, Inc. conducted operations from 1945 to 1968. An environmental soil gas investigation at 212 W. Pine Street conducted on behalf of the City of Lodi in 1996 by Kennedy /Jenks Consultants detected concentrations of PCE in soil gas samples ranging from 1 ug/L to more than 53,000 ug/L. TCE, 1,1,1-TCA, chloroform, and cis-1,2-dichloroethylene were also detected in soil gas samples at 212 W. Pine Street. Beckman and Company owned the property from May 1968 to January 1993. Soil gas investigation results reported by Levine Fricke on behalf of Guild in October 2002 showed PCE concentrations as high as 49,000 ug/L in samples taken on the Beckman property.

2.1.6 Lodi News Sentinel, Inc. formerly operated at 212 W. Pine Street. The Lodi News Sentinel, Inc. operated a newspaper printing business there from 1945 to 1968 and during that time used solvents and discharged wastewater to the sanitary sewer. As described in Section 2.1.5, various investigations detected the presence of hazardous substances at 212 W. Pine Street.

2.1.7 Farmers and Merchants Bank is the current owner of 116 W. Pine Street, the property where the former Fink Dry Cleaners (Fink) operated. The NERI Report identified Fink as a possible source of contamination in the LCPA. NERI detected low and moderate levels of PCE and TCE in passive soil gas samples in the immediate vicinity of Fink. In June of 2002 Levine Fricke, consultant for Guild Cleaners, Inc., detected PCE levels as high as 1,800 ug/L in active soil gas samples down gradient of Fink.

2.1.8 Mrs. Angelina Comporato is the current property owner of 408 S. School Street, which was the location of French Dry Cleaners (French). French, operated at 408 S. School Street from approximately 1952 to 1975. PCE was used and stored in 55-gallon drums above ground on the property during the time French operated. Mrs. Comporato has owned the property since February 26, 1975. In the NERI Report, French was identified as a confirmed source of PCE contamination. Passive soil gas samples taken at the facility by NERI in 1995 detected greater than 1,000 PCE ion counts.

2.2 Hazardous Substances Found at the Site. To date several investigations have been conducted in the LCPA by various consultants, DTSC, and RWQCB, Central Valley Region .

2.2.1 17 S. Church Street (associated with Guild). During RWQCB investigative work conducted in September of 1989, ambient and flush sewer samples collected from sewer manholes downstream of 17 S. Church Street indicated the presence of TCE and PCE. In December of 1989 and January of 1990 the RWQCB conducted passive soil gas sampling and detected up to 240,000 PCE ion counts in the vicinity of 17 S. Church Street. The passive soil gas survey conducted in 1989 identified PCE ion counts as high as 2,659,552 in the vicinity of 17 S. Church Street. Also, 2,665,429 PCE ion counts were identified in the first soil gas sample collected downstream of the sewer connection at 17 S. Church Street. In October of 1993 DTSC initiated a focused remedial investigation of the source of the PCE contamination found in Lodi municipal supply well number 3, which is located 3 blocks down gradient from 17 S. Church Street. Elevated levels of PCE in groundwater samples taken down gradient from 17 S. Church Street were reported at concentrations ranging from 8.2 to 2,300 ug/L in a 1994 investigation report prepared for DTSC by URS. The NERI Report identified 17 S. Church Street as a confirmed source of solvent contamination. During the NERI investigation of the sewer lateral adjacent to and down gradient from 17 S. Church Street, PCE and TCE concentrations up to 270 and 190 ug/L respectively were detected. The Henshaw Investigation reported that PCE in soil gas and groundwater was detected in the vicinity of 17 S. Church Street at concentrations of 7,600 ug/L and 74,000 ug/L respectively. Sampling results from soil gas samples taken at 17 S. Church Street during a soil gas investigation conducted by Levine Fricke and reported June 7, 2002, detected PCE concentrations ranging from 12 ug/L to 11,000 ug/L.

2.2.2 218 W. Pine Street (associated with Odd Fellows, Flair and R & J). A URS report prepared for DTSC in 1994 included soil gas sampling results at 218 W. Pine Street that showed detections of greater than 100,000 PCE ion counts. The NERI Report identified PCE and TCE ion counts greater than 1,000,000 and 1,000 respectively in soil gas samples in the immediate vicinity of 218 W. Pine Street. NERI also reported that ambient sewer samples taken immediately south of 218 W. Pine Street detected 79 and 270 ppb of PCE respectively. A flush sample detected TCE at 190 ug/L. NERI also reported PCE and TCE ion counts of 11,461 and 9,649, respectively in soil gas samples taken along the northern edge of the property at 218 W. Pine Street. Sampling results from soil gas samples taken at 218 W. Pine Street during a soil gas investigation conducted by Levine

Fricke and reported June 7, 2002, detected PCE concentrations ranging from 45 ug/L to 29,000 ug/L. TCE contamination in soil gas was also detected at one sample location at 218 W. Pine Street at 58 ug/L. The Henshaw Investigation reported PCE in soil gas and groundwater samples taken in the vicinity of 218 W. Pine Street at concentrations of 7,600 ug/L and 74,000 ug/L respectively.

2.2.3 212 W. Pine Street (associated with Lodi News Sentinel). A soil gas investigation at 212 W. Pine Street conducted on behalf of the City of Lodi in 1996 by Kennedy/Jenks Consultants detected concentrations of PCE in soil gas samples ranging from 1ug/L to more than 53,000 ug/L. TCE and other chlorinated solvents were also detected in soil gas samples at 212 W. Pine Street. Sampling results from soil gas samples taken at 212 W. Pine Street during a soil gas investigation conducted by Levine Fricke and reported June 7, 2002, detected PCE concentrations ranging from 16 ug/L to 49,000 ug/L. The NERI Report identified high PCE ion counts (>1,000,000) in soil gas samples collected near 212 W. Pine Street. In November 1995, soil samples collected at 212 W. Pine Street by Kleinfelder Inc. indicated that the underlying soils have been impacted by PCE, with a reported maximum concentration of 430 micrograms per kilogram. In March 1996, additional soil gas samples collected by Kennedy/Jenks Consultants identified PCE in 16 of 17 samples with a maximum concentration of 53,780 ug/L. The Henshaw Investigation reported that 212 W. Pine Street is a significant source of soil and groundwater contamination either through direct release to the subsurface or to the sanitary sewer system. PCE in soil gas and groundwater was detected in an alleyway behind 212 W. Pine Street at concentrations of 7,600 ug/L and 74,000 ug/L respectively. During November 2001 and again in March 2002 through an addendum to the Henshaw Investigation, the City of Lodi began conducting an indoor and ambient air investigation at the city hall annex located at 212 W. Pine Street. This investigation revealed the presence of VOC vapors including PCE in the building at concentrations as high as 960-micrograms per cubic meter.

2.2.4 408 S. School Street (associated with French). A passive soil gas survey conducted by the RWQCB in 1989 identified PCE ion counts as high as 220,700 in the vicinity of 408 S. School Street. In addition, 146,948 ion counts PCE and 6,581 ion counts TCE in a soil gas sample collected downstream of the sewer connection at 408 S. School Street. A passive soil gas survey conducted by NERI in 1996 identified PCE ion counts as high as 2,413,000 and TCE ion counts as high as 674,000 in the vicinity of 408 S. School Street. As a part of the NERI investigation, hydropunch grab groundwater samples taken in the vicinity of 408 S. School Street at 75 feet below ground surface (bgs) and 98 feet bgs detected PCE at 16.5 and 1.3 ug/L respectively, and TCE at 44.0 and 1.1 ug/L respectively.

2.2.5 116 W. Pine Street (associated with Fink). The NERI Report detected low and moderate levels of PCE and TCE in passive soil gas samples in the immediate vicinity of 116 W. Pine Street. In June of 2002 Levine Fricke, consultant for Guild Cleaners, Inc. reported PCE levels as high as 1,800 ug/L in active soil gas samples taken down gradient from 116 W. Pine Street.

2.3 Health Effects

2.3.1 Tetrachloroethylene (PCE) - This volatile organic compound can affect the central nervous system and cause anesthesia. PCE may irritate the skin and eyes after prolonged contact. It may cause liver damage and is known to be carcinogenic in experimental animals.

2.3.2 Trichloroethylene (TCE) – This volatile organic compound is an irritant to the eyes and nose. TCE may cause nausea, attitude of irresponsibility, blurred vision, and disturbance of central nervous system that may result in cardiac failure. Skin contact with TCE causes dermatitis. TCE causes an irritating sensation and lachrymation of the eyes. Also, TCE is known to be carcinogenic in experimental animals.

2.4 Routes of Exposure. PCE and other VOC laden wastewater was released directly to the soil or discharged into sanitary or industrial sewer lines. Due to cracks and imperfections in the joints or through leaching directly through pipe walls, these volatile, mobile, heavier than water liquid VOC contaminants have entered the vadose zone and spread to the groundwater. VOC vapors may migrate to indoor air from contaminated soil and groundwater. When VOCs are present in surface and subsurface soils, indoor air or drinking water, possible exposure routes include inhalation, ingestion and dermal contact.

2.5 Public Health and/or Environmental Risk. The City of Lodi encompasses an area of approximately 8.4 square miles (5,376 acres) and has an estimated population of 53,000. The LCPA occupies an area of approximately 107 acres. The land use in the LCPA is mixed-use, comprised of residential and commercial land uses. Soil and groundwater within this area is contaminated with VOCs, predominantly PCE and TCE. VOCs have been detected in the City's water supply wells. Groundwater is the sole source of drinking water for the City of Lodi and the primary source of water for agricultural use in this area. VOC contamination in the City's water supply system could present public health risks from ingestion, inhalation and dermal contact. VOCs have reportedly migrated to indoor air within the area and may present human health risks due to inhalation.

III. CONCLUSIONS OF LAW

3.1 Each of the Respondents is a responsible party as defined by Health and Safety Code section 25323.5.

3.2 Each of the substances listed in Section 2.2 is a "hazardous substance" as defined in Health and Safety Code section 25316.

3.3 There has been a "release" and/or there is a "threatened release" of hazardous substances listed in Section 2.2 at the Site, as defined in Health and Safety Code section 25320.

3.4 The actual and threatened release of hazardous substances at the Site may present an imminent and substantial endangerment to the public health or welfare or to the environment.

3.5 Response action is necessary to abate a public nuisance and/or to protect and preserve the public health.

IV. DETERMINATION

4.1 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that response action is necessary at the Site because there has been a release and/or there is a threatened release of a hazardous substance.

4.2 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that there may be an imminent and/or substantial endangerment to the public health or welfare or to the environment because of the release and/or the threatened release of the hazardous substances at the Site.

V. ORDER

Based on the foregoing FINDINGS, CONCLUSIONS, AND DETERMINATION, IT IS HEREBY ORDERED THAT Respondents conduct the following response actions in the manner specified herein, and in accordance with a schedule specified by DTSC as follows:

5.1 All response actions taken pursuant to this Order shall be consistent with the requirements of Chapter 6.8 (commencing with section 25300), Division 20 of the Health and Safety Code and any other applicable state or federal statutes and regulations. Respondents are jointly and severally responsible for carrying out all actions required by this Order, except for those actions expressly required only of another Respondent or group of Respondents.

5.1.1 Site Remediation Strategy. The purpose of this Order is to require for the Site: an Initial Site Investigation (ISI), implementation of any appropriate removal actions, completion of a Remedial Investigation/Feasibility Study (RI/FS), preparation of a Remedial Action Plan (RAP), preparation of California Environmental Quality Act (CEQA) documents, and Design and Implementation of the remedial actions approved in the RAP. Respondents shall develop an overall Site investigation and remediation strategy in conjunction with DTSC, which reflects program goals, objectives, and requirements. Current knowledge of the Site contamination sources, exposure pathways, and receptors shall be used in developing this strategy.

An objective of the Site investigations shall be to identify immediate or potential risks to public health and the environment and prioritize and implement response actions using removal actions and operable units, if appropriate, based on the relative risks at the Site. Respondents and DTSC shall develop and possibly modify Site priorities throughout the course of the investigations. If necessary for the protection of public health and the environment, DTSC will require additional response actions not specified in this Order to be performed as removal actions or separate operable units. Removal actions shall be implemented in accordance with a workplan and implementation schedule submitted by Respondents and approved by DTSC.

For operable unit remedial actions, DTSC will specify the separate and focused remedial phase activities to be conducted as RI/FS, RAP, Design, and Implementation. The focused activities shall be conducted in accordance with the corresponding remedial phase requirements specified in this Order, but shall only address the area or problem of the operable unit.

5.1.2 Remedial Action Objectives. Based on available information, DTSC has preliminarily determined that the remedial action objectives for the Site shall include:

- (a) Existing and potential beneficial uses of groundwater shall be protected. The Regional Water Quality Control Board Basin Plan identifies public water supply as a beneficial use of this aquifer. Therefore, drinking water standards or more conservative values shall be remedial action objectives for this Site.
- (b) Indoor air shall be protected. Therefore remedial action objectives shall include evaluating the potential for VOC vapor intrusion to buildings and where warranted, monitoring of VOC concentrations in buildings and assessment of the health-based risks caused by cumulative VOC concentrations in indoor air at this Site.
- (c) The reasonably foreseeable future land uses at the Site include light industrial, commercial office space, and residential. Therefore, remedial action objectives for contaminated media shall be developed which are protective of adults and children under their respective exposure scenarios.

5.1.3 Removal Actions. Respondents shall undertake removal actions such as Soil Vapor Extraction (SVE) or hot spot groundwater cleanup if, during the course of any response actions under this Order, DTSC determines that they are necessary to mitigate the release of hazardous substances at or emanating from the Site. DTSC may require Respondents to submit a removal action workplan that includes a schedule for implementing the workplan for DTSC's approval. Either DTSC or Respondents may identify the need for removal actions.

- (a) DTSC and the RWQCB have concurred with a workplan entitled Soil Vapor Extraction and Groundwater Sparging Pilot Test Work Plan Guild Cleaners 17 S.

Church Street Lodi, California dated June 19, 2002. Guild has completed phase one of this workplan. Guild shall complete the scope of work in the workplan according to the proposed schedule and shall report the pilot test results to DTSC.

(b) Within sixty (60) days of the effective date of this Order, Respondents shall submit to DTSC for approval a workplan to construct and conduct testing of a pilot SVE system at or in the vicinity of 218 W. Pine Street and 212 W. Pine Street in Lodi where existing soil gas data has demonstrated the potential need for an SVE system. The SVE pilot system workplan shall include the SVE pilot system design and a schedule for constructing the pilot SVE system and conducting pilot tests. The Respondents shall report the results of the pilot tests to DTSC. Based on a review of the pilot test results, DTSC will evaluate the technical effectiveness and feasibility of implementing one or more SVE systems or other remedial systems as interim removal actions in the vicinity of the addresses noted in sections 5.1.3 (a) and (b) of this order. DTSC may require the Respondents to submit a removal action workplan for such system(s). Each removal action workplan shall include a system design and a schedule for constructing and implementing the system(s).

(c) As determined by DTSC, Respondents shall evaluate the need for and implement indoor air mitigation measures where warranted. Respondents shall evaluate health risk management options for each affected building. Health risk management options may include architectural modifications and engineering or institutional controls. Examples include sealing the building envelope, modifications to the building foundation system, building subsurface depressurization systems, modifications to a building's HVAC system, installation of soil vapor extraction systems and temporarily relocating building occupants.

5.1.4 Site Remediation Strategy Meeting. Respondents, including the Project Coordinator (Section 6.1) and Project Engineer/Geologist (Section 6.2), shall meet with DTSC within twenty (20) days from the effective date of this Order, and concurrent with the development of any workplans to discuss the Site remediation strategy. These discussions will include Site risks and priorities; project planning, phasing and scheduling, remedial action objectives, remedial technologies, data quality objectives, and the RI/FS workplan. Results of the discussions will be included in the Scoping Document, Section 5.2.2(b) of this Order.

5.1.5 Initial Site Investigation (ISI). Respondents shall conduct ISIs for each property identified in sections 2.1.1 through 2.1.8 above of this Order.

(a) Within sixty (60) days of the effective date of this Order, Respondents shall provide to DTSC a report on the properties identified in sections 2.1.1 through 2.1.8 of this Order. The report shall include a history of owners, operators, operations, hazardous materials usage and management practices at such properties. The report shall also include historic hazardous material disposal practices, such as

discharges to the city sewer or industrial wastewater conveyance system. The report shall include a mass balance analysis of the processes used at the properties and estimates for the hazardous materials used and disposed of. The mass balance shall be supported by purchasing records and records of hazardous materials disposal which shall be submitted with each analysis. Based on this evaluation, Respondents shall identify all the Potential Constituents of Concern (PCOC) including metals, VOCs, Semi-Volatile Organic Constituents (SVOCs), petroleum hydrocarbons, and Polycyclic Aromatic Hydrocarbons (PAHs).

(b) Within sixty (60) days of the effective date of this Order, the Respondents shall prepare an ISI work plan for sewer investigation and vadose zone sampling for all PCOCs. Sampling shall include soil gas for VOCs, soil sampling, if warranted for SVOCs, metals and PAHs, and soil parameters for vapor intrusion modeling. Soil parameters collected shall include moisture content wet and dry soil porosity, soil bulk density and soil grain size. The ISI workplan shall identify methods for investigating the integrity of the sewer and industrial wastewater laterals. The ISI work plan shall include a Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan consistent with the requirements of such plans identified in section 5.2.2 of this order.

(c) Based on the implementation schedule for the ISI workplan approved by DTSC, Respondents shall submit an ISI Report which summarizes the results of the ISI and makes recommendations for subsequent investigative actions.

5.2 Remedial Investigation/Feasibility Study (RI/FS). The Respondents shall conduct a RI/FS for the Site. The RI/FS may be performed as a series of focused RI/FSs, if appropriate, based on Site priorities. This RI/FS shall be prepared consistent with the U.S. Environmental Protection Agency's "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988. The purpose of the RI/FS is to assess Site conditions and to evaluate alternatives to the extent necessary to select a remedy appropriate for the Site. RI and FS activities shall be conducted concurrently and iteratively so that the investigations can be completed expeditiously.

DTSC has previously concurred with a work plan to conduct RI/FS activities entitled "Final Revised Remedial Investigation and Feasibility Study Work Plan, Lodi, California," prepared for Guild by Levine Fricke, dated February 7, 2003. That work plan is incorporated herein by reference and is considered a required part of this Order.

Because of the unknown nature of the Site and iterative nature of the RI/FS, additional requirements, data, and analyses may be identified throughout the process. Respondents shall fulfill additional data and analysis needs identified by DTSC; these additional data and analysis requests will be consistent with the general scope and objectives of this Order.

The following elements of the RI/FS process shall be preliminarily defined in the initial Site scoping and refined and modified as additional information is gathered throughout the RI/FS process.

- (a) Conceptual Site Model identifying contamination sources, exposure pathways, and receptors;
- (b) Federal, State and local remedial action objectives including applicable legal requirements or relevant and appropriate standards;
- (c) Project phasing including the identification of removal actions and operable units;
- (d) General response actions and associated remedial technology types; and
- (e) The need for treatability studies.

5.2.1 RI/FS Objectives. The objectives of the RI/FS are to:

- (a) Determine the nature and full extent of hazardous substance contamination of air, soil, surface water and groundwater at the Site;
- (b) Identify all actual and potential exposure pathways and routes through environmental media;
- (c) Determine the magnitude and probability of actual or potential harm to public health, safety or welfare or to the environment posed by the threatened or actual release of hazardous substances at or from the Site;
- (d) Identify and evaluate appropriate response actions to prevent or minimize future releases and mitigate any releases which have already occurred;
- (e) Collect and evaluate the information necessary to prepare a RAP; and
- (f) Integrate the Respondent's RI/FS with the previous work plans prepared by the Respondents and approved by the RWQCB or DTSC.

5.2.2 RI/FS Workplan. Within one-hundred-twenty (120) days of the effective date of this Order, or as specified by DTSC pursuant to the ISI required by Section 5.1.5 of this Order, Respondents shall prepare and submit to DTSC for review and approval a detailed RI/FS Workplan and implementation schedule that covers all the activities necessary to conduct a complete RI/FS of the Site.

The RI/FS Workplan shall include a detailed description of the tasks to be performed, information or data needed for each task, and the deliverables, which will be submitted to DTSC. Either Respondents or DTSC may identify the need for additional work.

The RI/FS Workplan shall include all the sections and address each component listed below.

(a) Project Management Plan. The Project Management Plan shall define relationships and responsibilities for major tasks and project management items by Respondents, its contractors, subcontractors, and consultants. The plan shall include an organization chart with the names and titles of key personnel and a description of their individual responsibilities.

(b) Scoping Document. To the extent not already adequately addressed in the ISI, the Scoping Document shall incorporate program goals, program management principles, and expectations contained in the National Contingency Plan (NCP) (40 Code of Federal Regulations (CFR) Part 300), as amended. It shall include:

(1) An analysis and summary of the Site background and the physical setting. At a minimum, the following information is required:

(a) A map of the Site, and if they exist, aerial photographs and blueprints showing buildings and structures;

(b) A description of past disposal practices;

(c) Because much of the contamination has been released to the environment through discharges to the City of Lodi sanitary sewer or industrial waste water conveyance system, the Respondents shall provide descriptions, including maintenance histories, of the sewer or industrial waste water systems used for waste water discharges, at the Site. If warranted, as determined by DTSC, the Respondents shall also conduct video surveys of the sewer or waste water systems at the Site and provide information that identifies the location of sags and discontinuities in the systems where waste water may have leaked.

(d) A list of all hazardous substances that were disposed, discharged, spilled, treated, stored, transferred, transported, handled or used at the Site, and a description of their estimated volumes, concentrations, and characteristics;

(e) A description of the characteristics of the hazardous substances at the Site; and

(f) If applicable, a description of all current and past manufacturing processes which are or were related to each hazardous substance.

(2) An analysis and summary of previous response actions including a summary of all existing data including air, soil, surface water, and groundwater data and the Quality Assurance/Quality Control (QA/QC) procedures that were followed;

(3) Presentation of the Conceptual Site Model;

(4) The scope and objectives of RI/FS activities;

(5) Preliminary identification of possible response actions and the data needed for the evaluation of alternatives. Removal actions shall be proposed, if needed, based on the initial evaluation of threats to public health and the environment. If remedial actions involving treatment can be identified, treatability studies shall be conducted during the characterization phase, unless Respondents and DTSC agree that such studies are unnecessary as set forth in Section 5.4;

(6) Based on the results of vadose zone sampling conducted pursuant to the ISI as described in Section 5.1.5 of this Order, Respondents may be required to submit a work plan for evaluating the potential for vapor intrusion to indoor air for buildings at the Site. The work plans may in some cases include sub slab or foundation air and/or ambient and indoor air sampling and monitoring in and around those buildings; and

(7) If applicable, initial presentation of the Site Remediation Strategy.

(c) Field Sampling Plan. The Field Sampling Plan shall include:

(1) Sampling objectives, including a brief description of data gaps and how the field-sampling plan will address these gaps;

(2) Sample locations, including a map showing these locations, and proposed frequency;

(3) Sample designation or numbering system;

(4) Detailed specification of sampling equipment and procedures;

(5) Sample handling and analysis including preservation methods, shipping requirements and holding times; and

(6) Management plan for wastes generated.

(d) Quality Assurance Project Plan. The plan shall include:

- (1) Project organization and responsibilities with respect to sampling and analysis;
- (2) Quality assurance objectives for measurement including accuracy, precision, and method detection limits. In selecting analytical methods, Respondents shall consider obtaining detection limits at or below potentially applicable legal requirements or relevant and appropriate standards, such as Maximum Contaminant Levels (MCLs) or Maximum Contaminant Level Goals (MCLGs);
- (3) Sampling procedures;
- (4) Sample custody procedures and documentation;
- (5) Field and laboratory calibration procedures;
- (6) Analytical procedures;
- (7) Laboratory to be used, certified pursuant to Health and Safety Code section 25198;
- (8) Specific routine procedures used to assess data (precision, accuracy and completeness) and response actions;
- (9) Reporting procedure for measurement of system performance and data quality;
- (10) Data management, data reduction, validation and reporting. Information shall be accessible to downloading into DTSC's system; and internal quality control
- (11) An Assessment of Data Quality Objective (DQO) utilizing the seven step DQO process as identified in the United States Environmental Protection Agency (U.S. EPA) Guidance Document EPA QA/G-4.

(e) Health and Safety Plan. A site-specific Health and Safety Plan shall be prepared in accordance with federal (29 CFR 1910.120) and state (title 8, Cal. Code Regs., section 5192) regulations and shall describe the following:

- (1) Field activities including work tasks, objectives, and personnel requirements and a description of hazardous substances on the Site;
- (2) Respondents key personnel and responsibilities;
- (3) Potential hazards to workers including chemical hazards, physical hazards, confined spaces and climatic conditions;

- (4) Potential risks arising from the work being performed including the impact to workers, the community and the environment;
- (5) Exposure monitoring plan;
- (6) Personal protective equipment and engineering controls;
- (7) Site controls including work zones and security measures;
- (8) Decontamination procedures;
- (9) General safe work practices;
- (10) Sanitation facilities;
- (11) Standard operating procedures;
- (12) Emergency response plan covering workers addressing potential hazardous material releases;
- (13) Training requirements;
- (14) Medical surveillance program; and
- (15) Record keeping.

(f) Other Activities. A description of any other significant activities, which are appropriate to complete the RI/FS, shall be included.

(g) Schedule. A schedule, which provides specific time frames and dates for completion of each activity and report conducted or submitted under the RI/FS Workplan including the schedules for removal actions and operable unit activities.

5.2.3 RI/FS Workplan Implementation. Respondents shall implement the approved RI/FS Work plan, and any RI/FS or other site investigation workplans previously approved by DTSC, including those workplans approved in cooperation with the RWQCB.

5.2.4 RI/FS Workplan Revisions. If Respondents propose to modify any methods or initiate new activities for which no Field Sampling Plan, Health and Safety Plan, Quality Assurance Project Plan or other necessary procedures/plans have been established, Respondents shall prepare an addendum to the approved plan(s) for DTSC review and approval prior to modifying the method or initiating new activities.

5.3 Interim Screening and Evaluation of Remedial Technologies. At the request of DTSC, Respondents shall submit an interim document, which identifies and evaluates potentially suitable remedial technologies and recommendations for treatability studies.

5.4 Treatability Studies. Treatability testing will be performed by Respondents to develop data for the detailed remedial alternatives. Treatability testing is required to demonstrate the implementability and effectiveness of technologies, unless Respondents can show DTSC that similar data or documentation or information exists. The required deliverables are: a workplan, a sampling and analysis plan, and a treatability evaluation report. To the extent practicable, treatability studies will be proposed and implemented during the latter part of Site characterization.

5.5 Remedial Investigation (RI) Report. The RI Report shall be prepared and submitted by Respondents to DTSC for review and approval in accordance with the approved RI/FS workplan schedule. The purpose of the RI is to collect data necessary to adequately characterize the Site for the purposes of defining risks to public health and the environment and developing and evaluating effective remedial alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Respondents shall identify the sources of contamination and define the nature, extent, and volume of the contamination. Using this information, the contaminant fate and transport shall be evaluated. The RI Report shall contain:

(a) Site Physical Characteristics. Data on the physical characteristics of the Site and surrounding area shall be collected to the extent necessary to define potential transport pathways and receptor populations and to provide sufficient engineering data for development and screening of remedial action alternatives.

(b) Sources of Contamination. Contamination sources (including heavily contaminated media) shall be defined. The data shall include the source locations, type of contaminant, waste characteristics, and Site features related to contaminant migration and human exposure.

(c) Nature and Extent of Contamination. Contaminants shall be identified and the horizontal and vertical extent of contamination shall be defined in soil, groundwater, Surface water, sediment, air, and biota. Spatial and temporal trends and the fate and transport of contamination shall be evaluated.

5.6 Baseline Health and Ecological Risk Assessment. Respondents shall perform health and ecological risk assessments for the Site that meets the requirements of Health and Safety Code section 25356.1.5, subdivision (b). Respondents shall submit a Baseline Health and Ecological Risk Assessment Report within thirty (30) days from the approval of the RI Report. The report shall be prepared consistent with U.S. EPA and California Environmental Protection Agency guidance and regulations, including as a minimum: Risk

Assessment Guidance for Superfund, Volume 1; Human Health Evaluation Manual, December 1989; Superfund Exposure Assessment Manual, April 1988; Risk Assessment Guidance for Superfund, Volume 2, Environmental Evaluation Manual, March 1989; and all other related or relevant policies, practices and guidelines of the California Environmental Protection Agency and policies, practices and guidelines developed by U.S.EPA pursuant to 40 CFR 300.400 et seq. The Baseline Health and Ecological Risk Assessment Report shall include the following components:

(a) Contaminant Identification. Characterization data shall identify contaminants of concern for the risk assessment process.

(b) Environmental Evaluation. An ecological assessment consisting of:

(1) Identification of sensitive environments and rare, threatened, or endangered species and their habitats; and

(2) As appropriate, ecological investigations to assess the actual or potential effects on the environment and/or develop remediation criteria.

(c) Exposure Assessment. The objectives of an exposure assessment are to identify actual or potential exposure pathways, to characterize the potentially exposed populations, and to determine the extent of the exposure. Exposed populations may include industrial workers, residents, and subgroups that comprise a meaningful portion of the general population, including, but not limited to, infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations, that are identifiable as being at greater risk of adverse health effects due to exposure to hazardous substances than the general population.

(d) Toxicity Assessment. Respondents shall evaluate the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a chemical's potential carcinogenicity in humans.

(e) Risk Characterization. Risk characterization shall include the potential risks of adverse health or environmental effects for each of the exposure scenarios derived in the exposure assessment.

5.7 Feasibility Study (FS) Report. The FS Report shall be prepared and submitted by Respondents to DTSC for review and approval, no later than sixty (60) days from submittal of the RI Report. The FS Report shall summarize the results of the FS including the following:

- (a) Documentation of all treatability studies conducted.
- (b) Development of medium specific or operable unit specific remedial action objectives, including legal requirements and other promulgated standards that are relevant.
- (c) Identification and screening of general response actions, remedial technologies, and process options on a medium and/or operable unit specific basis.
- (d) Evaluation of alternatives based on the criteria contained in the NCP including:

Threshold Criteria:

- (1) Overall protection of human health and the environment.
- (2) Compliance with legal requirements and other promulgated standards that are relevant.

Primary Balancing Criteria:

- (1) Long-term effectiveness and permanence.
- (2) Reduction of toxicity, mobility, or volume through treatment.
- (3) Short-term effectiveness.
- (4) Implementability based on technical and administrative feasibility.
- (5) Cost.

Modifying Criteria:

- (1) State and local agency acceptance.
- (2) Community acceptance.
- (e) Proposed remedial actions.

5.8 Public Participation Plan (Community Relations). Respondents shall work cooperatively with DTSC in providing an opportunity for meaningful public participation in response actions. Any such public participation activities shall be conducted in accordance with Health and Safety Code sections 25356.1 and 25358.7 and DTSC's most current Public Participation Policy and Guidance Manual, and shall be subject to DTSC's review and approval.

Respondents, in coordination with DTSC, shall conduct a baseline community survey and develop a Public Participation Plan (PPP) which describes how, under this Order, the public and adjoining community will be kept informed of activities conducted at the Site and how Respondents will be responding to inquiries from concerned citizens. Major steps in developing a PPP are as follows:

- (a) Develop proposed list of interviewees;
- (b) Schedule and conduct community interviews; and
- (c) Analyze interview notes, and develop objectives.

Respondents shall conduct the baseline community survey and submit the PPP for DTSC's review within forty (40) days of the effective date of this Order.

Respondents shall implement any of the public participation support activities identified in the PPP, at the request of DTSC. DTSC retains the right to implement any of these activities independently. These activities include, but are not limited to, development and distribution of fact sheets; public meeting preparations; and development and placement of public notices.

5.9 California Environmental Quality Act (CEQA). DTSC will comply with CEQA for all activities required by this Order that are projects subject to CEQA. Upon DTSC request, Respondents shall provide DTSC with any information that DTSC deems necessary to facilitate compliance with CEQA. The costs incurred by DTSC in complying with CEQA are response costs and Respondents shall reimburse DTSC for such costs pursuant to Section 6.19.

5.10 Remedial Action Plan (RAP). No later than thirty (30) days after DTSC approval of the FS Report, Respondents shall prepare and submit to DTSC a draft RAP. The draft RAP shall be consistent with the NCP and Health and Safety Code section 25356.1. The draft RAP public review process may be combined with that of any other documents required by CEQA. The draft RAP shall be based on and summarize the approved RI/FS Reports, and shall clearly set forth:

- (a) Health and safety risks posed by the conditions at the Site.
- (b) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources.
- (c) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses.
- (d) Site specific characteristics, including the potential for offsite migration of hazardous substances, the surface or subsurface soil, and the hydro geologic conditions, as well as preexisting background contamination levels.

(e) Cost-effectiveness of alternative remedial action measures. Land disposal shall not be deemed the most cost-effective measure merely on the basis of lower short-term cost.

(f) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous substances as opposed to treatment of the hazardous substances to remove or reduce their volume, toxicity, or mobility prior to disposal.

(g) A statement of reasons setting forth the basis for the removal and remedial actions selected. The statement shall include an evaluation of each proposed alternative submitted and evaluate the consistency of the removal and remedial actions proposed by the plan with the NCP.

(h) A schedule for implementation of all proposed removal and remedial actions.

In conjunction with DTSC, Respondents shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. Within 10 days of closure of the public comment period, Respondents shall submit to DTSC a written Responsiveness Summary of all written and oral comments presented and received during the public comment period.

Following DTSC's review and finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAP. Respondents shall modify the document in accordance with DTSC's specifications and submit a final RAP within fifteen (15) days of receipt of DTSC's comments.

5.11 Remedial Design (RD). Within sixty (60) days after DTSC approval of the final RAP, Respondents shall submit to DTSC for review and approval a RD describing in detail the technical and operational plans for implementation of the final RAP, which includes the following elements, as applicable:

(a) Design criteria, process unit and pipe sizing calculations, process diagrams, and final plans and specifications for facilities to be constructed.

(b) Description of equipment used to excavate, handle, and transport contaminated material.

(c) A field sampling and laboratory analysis plan addressing sampling during implementation and to confirm achievement of the performance objectives of the RAP.

(d) A transportation plan identifying routes of travel and final destination of wastes generated and disposed.

(e) For groundwater extraction systems: aquifer test results, capture zone calculations, specifications for extraction and performance monitoring wells, and a plan to demonstrate that capture is achieved.

(f) An updated health and safety plan addressing the implementation activities.

(g) Identification of any necessary permits and agreements.

(h) An operation and maintenance plan including any required monitoring.

(i) A detailed schedule for implementation of the remedial action consistent with the schedule contained in the approved RAP including procurement, mobilization, construction phasing, sampling, facility startup, and testing.

5.12 Deed Restrictions. If the approved remedy in the final RAP includes deed restrictions, the current owner(s) of the Site shall sign and record deed restrictions approved by DTSC within ninety (90) days of DTSC's approval of the final RAP.

5.13 Implementation of Final RAP. Upon DTSC approval of the RD, Respondents shall implement the final RAP in accordance with the approved schedule in the RD. Within thirty (30) days of completion of field activities, Respondents shall submit an Implementation Report documenting the implementation of the final RAP and RD.

5.14 Operation and Maintenance (O&M). Respondents shall comply with all O&M requirements in accordance with the final RAP and approved RD. Within thirty (30) days of the date of DTSC's request, Respondents shall prepare and submit to DTSC for approval an O&M plan that includes an implementation schedule. Respondents shall implement the plan in accordance with the approved schedule.

5.15 Five-Year Review. Respondents shall review and reevaluate the remedial action after a period of 5 years from the completion of construction and startup, and every 5 years thereafter. The review and reevaluation shall be conducted to determine if human health and the environment are being protected by the remedial action. Within thirty (30) calendar days before the end of the time period approved by DTSC to review and reevaluate the remedial action, Respondents shall submit a remedial action review workplan to DTSC for review and approval. Within sixty (60) days of DTSC's approval of the workplan, Respondents shall implement the workplan and shall submit a comprehensive report of the results of the remedial action review. The report shall describe the results of all sample analyses, tests and other data generated or received by Respondents and evaluate the adequacy of the implemented remedy in protecting public health, safety and the environment. As a result of any review performed under this Section, Respondents may be required to perform additional Work or to modify Work previously performed.

5.16 Changes During Implementation of the Final RAP. During the implementation of the final RAP and RD, DTSC may specify such additions, modifications, and revisions to the RD, as DTSC deems necessary to protect public health and safety or the environment or to implement the RAP.

5.17 Stop Work Order. In the event that DTSC determines that any activity (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Respondents to stop further implementation of this Order for such period of time needed to abate the endangerment. In the event that DTSC determines that any site activities (whether or not pursued in compliance with this Order) are proceeding without DTSC authorization, DTSC may order Respondents to stop further implementation of this Order or activity for such period of time needed to obtain DTSC authorization, if such authorization is appropriate. Any deadline in this Order directly affected by a Stop Work Order, under this Section, shall be extended for the term of the Stop Work Order.

5.18 Emergency Response Action/Notification. In the event of any action or occurrence (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance) during the course of this Order, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the Project Manager. Respondents shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Order. Within seven (7) days of the onset of such an event, Respondents shall furnish a report to DTSC, signed by Respondents' Project Coordinator, setting forth the events which occurred and the measures taken in the response thereto. In the event that Respondents fail to take appropriate response and DTSC takes the action instead, Respondents shall be liable to DTSC for all costs of the response action. Nothing in this Section shall be deemed to limit any other notification requirement to which Respondents may be subject.

5.19 Discontinuation of Remedial Technology. Any remedial technology employed in implementation of the final RAP shall be left in place and operated by Respondents until and to the extent that DTSC authorizes Respondents in writing to discontinue, move or modify some or all of the remedial technology because Respondents has met the criteria specified in the final RAP for its discontinuance, or because the modifications would better achieve the goals of the final RAP.

5.20 Financial Assurance. Respondents shall demonstrate to DTSC and maintain financial assurance for operation and maintenance and monitoring. Respondents shall demonstrate financial assurance prior to the time that operation and maintenance activities are initiated and shall maintain it throughout the period of time necessary to complete all required operation and maintenance activities. The financial assurance mechanisms shall

meet the requirements of Health and Safety Code Section 25355.2. All financial assurance mechanisms are subject to the review and approval of DTSC.

VI. GENERAL PROVISIONS

6.1 Project Coordinator. Within fifteen (15) days from the effective date of this Order, Respondents shall submit to DTSC in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from DTSC. Respondents shall promptly notify DTSC of any change in the identity of the Project Coordinator. Respondents shall obtain approval from DTSC before the new Project Coordinator performs any work under this Order.

6.1.1 Communication and Coordination Plan (CCP). Within sixty (60) days from the effective date of this Order, Respondents shall submit to DTSC for its approval, a CCP which specifies the requirements and procedures by which Respondents will communicate and coordinate with one another, the City of Lodi, and any Performing Parties set forth below in section 6.1.2.

6.1.2 Performing Party(ies). To the extent that any person or persons are performing or have stated an intent to perform any of the work required by this Order, any order of another State agency, or a court order (Performing Party(ies)), Respondents shall make best efforts to coordinate with the Performing Parties.

6.2 Project Engineer/Geologist. The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or a registered geologist in the State of California, with expertise in hazardous substance site cleanups. Within twenty (20) calendar days from the effective date of this Order, Respondents must submit: a) The name and address of the project engineer or geologist chosen by Respondents; and b) in order to demonstrate expertise in hazardous substance cleanup, the resume of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondents shall promptly notify DTSC of any change in the identity of the Project Engineer/Geologist. Respondents shall obtain approval from DTSC before the new Project Engineer/Geologist performs any work under this Order.

6.3 Quarterly Summary Reports. Within ninety (90) days from the effective date of this Order, and on a quarterly basis thereafter, Respondents shall submit a Quarterly Summary Report of its activities under the provisions of this Order. The report shall be received by DTSC by the fifteenth (15th) day of each calendar quarter and shall describe:

- (a) Specific actions taken by or on behalf of Respondents during the previous calendar quarter;

- (b) Actions expected to be undertaken during the current calendar quarter;
- (c) All planned activities for the next calendar quarter;
- (d) Any requirements under this Order that were not completed;
- (e) Any problems or anticipated problems in complying with this Order; and
- (f) All results of sample analyses, tests, and other data generated under this Order during the previous calendar month, and any significant findings from these data.

6.4 Quality Assurance/Quality Control (QA/QC). All sampling and analysis conducted by Respondents under this Order shall be performed in accordance with QA/QC procedures submitted by Respondents and approved by DTSC pursuant to this Order.

6.5 Submittals. Two (2) copies of all submittals and notifications from Respondents required by this Order shall be sent simultaneously to:

Mr. James L. Tjosvold, P.E., Chief
Northern California-Central Cleanup Operations Branch
Site Mitigation and Brownfields Reuse Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200
Attention: Mr. J.M. Vivas, P.E.

Ms. Ton Vorster
California Regional Water Quality Control Board
Central Valley Region
Attention: Mr. Duncan Austin, P.E.
3443 Routier Road, Suite A
Sacramento, California 95827-3003

6.6 Communications. All approvals and decisions of DTSC made regarding submittals and notifications will be communicated to Respondents in writing by the Site Mitigation Branch Chief or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by Respondents shall be construed to relieve Respondents of the obligation to obtain such formal approvals as may be required. DTSC may consult with other state agencies to provide oversight of the investigation and remediation of the Site as appropriate.

6.7 DTSC Review and Approval.

(a) All response actions taken pursuant to this Order shall be subject to the approval of DTSC. Respondents shall submit all deliverables required by this Order to DTSC. Once the deliverables are approved by DTSC, they shall be deemed incorporated into, and where applicable, enforceable under this Order.

(b) If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, DTSC may:

(1) Modify the document as deemed necessary and approve the document as modified; or

(2) Return comments to Respondents with recommended changes and a date by which Respondents must submit to DTSC a revised document incorporating the recommended changes.

(c) Any modifications, comments or other directives issued pursuant to (a) above, are incorporated into this Order. Any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Order.

6.8 Compliance with Applicable Laws. Respondents shall conform all actions required by this Order to all applicable federal, state and local laws and regulations, including but not limited to compliance with all applicable requirements of the California State Water Resources Control Board (State Board) and the RWQCB. Such requirements include the applicable provisions of the Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code), State Board Resolution 92-49, and other plans and policies of the State Board and RWQCB. Respondents shall provide copies of all submittals and correspondence to the RWQCB for its review and comment. When the RWQCB provides written comments on submittals, Respondents shall address those comments in subsequent submittals. Respondents shall be liable to the RWQCB for the RWQCB's investigation, analysis, planning, implementation, oversight or other costs as identified by the RWQCB pursuant to the California Water Code. Respondents shall pay such costs pursuant to directives from the RWQCB.

6.9 Respondent Liabilities. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondents. Nothing in this Order is intended or shall be construed to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed to: limit or preclude DTSC, the RWQCB, or any other state or local agency, from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof; or to limit

the authority of DTSC, the RWQCB, or any other state or local agency in the enforcement or administration of any provision of law which it is specifically permitted or required to enforce and administer. Notwithstanding compliance with the terms of this Order, Respondents may be required to take further actions as are necessary to protect public health and the environment.

6.10 Site Access. Access to the Site and laboratories used for analyses of samples under this Order shall be provided at all reasonable times to employees, contractors, and consultants of DTSC. Nothing in this Section is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Site; reviewing the progress of Respondents in carrying out the terms of this Order; conducting such tests as DTSC may deem necessary; and verifying the data submitted to DTSC by Respondents.

To the extent the Site or any other property to which access is required for the implementation of this Order is owned or controlled by persons other than Respondents, Respondents shall use best efforts to secure from such persons access for Respondents, as well as DTSC, its representatives, and contractors, as necessary to effectuate this Order. To the extent that any portion of the Site is controlled by tenants of Respondents, Respondents shall use best efforts to secure from such tenants, access for Respondents, as well as for DTSC, its representatives, and contractors, as necessary to effectuate this Order. For purposes of this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within forty-five (45) days of the effective date of this Order, or within forty-five (45) days of the date DTSC notifies Respondents in writing that additional access beyond that previously secured is necessary, Respondents shall promptly notify DTSC, and shall include in that notification a summary of the steps Respondents have taken to attempt to obtain access. DTSC may, as it deems appropriate, assist Respondents in obtaining access. Respondents shall reimburse DTSC in obtaining access, including, but not limited to, attorneys fees and the amount of just compensation.

6.11 Site Access for Respondents. The Site owner Respondents shall grant access to the other Respondents who are in compliance with this Order for the purpose of conducting activities pursuant to this Order or for activities deemed necessary by DTSC to meet the objectives of this Order.

6.12 Sampling, Data and Document Availability. Respondents shall permit DTSC and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondents or on Respondents behalf in any way pertaining to work undertaken pursuant to this Order. Respondents shall submit all such data upon the request of and in the format specified by DTSC. Copies shall be provided within seven (7)

days of receipt of DTSC's written request. Respondents shall inform DTSC at least seven (7) days in advance of all field sampling under this Order, and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Respondents pursuant to this Order. Respondents shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.13 Record Retention. All such data, reports and other documents shall be preserved by Respondents for a minimum of ten (10) years after the conclusion of all activities under this Order. If DTSC requests that some or all of these documents be preserved for a longer period of time, Respondents shall either comply with that request or deliver the documents to DTSC, or permit DTSC to copy the documents prior to destruction.

Respondents shall notify DTSC in writing at least six (6) months prior to destroying any documents prepared pursuant to this Order.

6.14 Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or related parties specified in Section 6.26, Parties Bound, in carrying out activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by Respondents or its agents in carrying out activities pursuant to this Order.

6.15 Additional Actions. By issuance of this Order, DTSC does not waive the right to take any further actions authorized by law.

6.16 Extension Requests. If Respondents are unable to perform any activity or submit any document within the time required under this Order, Respondents may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

6.17 Extension Approvals. If DTSC determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondents shall comply with the new schedule incorporated in this Order.

6.18 Liability for Costs. Respondents are liable for all of DTSC's costs that have been incurred in taking response actions at the Site (including costs of overseeing response actions performed by Respondents) and costs to be incurred in the future.

6.19 Payment of Costs. DTSC may bill Respondents for costs incurred in taking response actions at the Site prior to the effective date of this Order. DTSC will bill Respondents quarterly for its response costs incurred after the effective date of this Order. Respondents shall pay DTSC within sixty (60) days of receipt of any DTSC billing. Any

billing not paid within sixty (60) days is subject to interest calculated from the date of the billing pursuant to Health and Safety Code section 25360.1. All payments made by Respondents pursuant to this Order shall be by cashier's or certified check made payable to the Department of Toxic Substances Control, and shall bear on the face the project code of the Site (101592-00) and the Docket number of this Order (I&SE 02/03-024). Payments shall be sent to:

Department of Toxic Substances Control
Accounting/Cashier
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806

A photocopy of all payment checks shall also be sent to the person designated by DTSC to receive submittals under this Order.

6.20 Severability. The requirements of this Order are severable, and Respondents shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

6.21 Incorporation of Plans, Schedules and Reports. All plans, schedules, reports, specifications and other documents that are submitted by Respondents pursuant to this Order are incorporated in this Order upon DTSC's approval or as modified pursuant to Section 6.7, DTSC Review and Approval, and shall be implemented by Respondents. Any noncompliance with the documents incorporated in this Order shall be deemed a failure or refusal to comply with this Order.

6.22 Modifications. DTSC reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon the date the modification is signed by DTSC and shall be deemed incorporated in this Order.

6.23 Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days.

6.24 Termination and Satisfaction. Except for Respondents obligations under Sections 5.14 Operation and Maintenance (O&M), 5.15 Five-Year Review, 5.20 Financial Assurance, 6.13 Record Retention, 6.18 Liability for Costs, and 6.19 Payment of Costs, Respondents obligations under this Order shall terminate and be deemed satisfied upon Respondents receipt of written notice from DTSC that Respondents has complied with all the terms of this Order.

6.25 Calendar of Tasks and Schedules. This Section is merely for the convenience of listing in one location the submittals required by this Order. If there is a conflict between the date for a scheduled submittal within this Section and the date within the Section describing the specific requirement, the latter shall govern.

Calendar of Tasks and Schedules

TASKS	SCHEDULES
1. Identify Project Coordinator; Section 6.1;	Within fifteen (15) days from the effective date of this Order.
2. Identify Project Engineer/Geologist; Section 6.2;	Within twenty (20) days from the effective date of this Order.
3. Attend Site Remediation Strategy Meeting; Section 5.1.4;	Within twenty (20) days from the effective date of this Order.
4. Submit Communication and Coordination Plan, Section 6.1.1;	Within sixty (60) days from the effective date of this Order.
5. Submit SVE Work Plan, Section 5.1.3(b);	Within sixty (60) days from the effective date of this Order.
6. ISI Workplan/Hazardous Material Management Report, Section 5.1.5(a), (b);	Within sixty (60) days from the effective date of this Order.
7. Submit ISI Report, Section 5.1.5(c);	As approved by DTSC in the ISI Workplan.
8. Submit Quarterly Summary Reports; Section 6.3;	Within ninety (90) days from the effective date of this Order.
9. Submit RI/FS Workplan; Section 5.2.2;	Within one-hundred-twenty (120) days from the effective date of this Order or as specified by DTSC.
10. Submit interim screening and evaluation; document; Section 5.3;	As requested by DTSC.
11. Submit Treatability Studies; Section 5.4;	As required during Site characterization or as requested by DTSC.
12. Submit RI Report; Section 5.5;	As required during Site characterization or as requested by DTSC.
13. Submit Baseline Risk Assessment; Section 5.6;	Within thirty (30) days from approval of the RI Report.
14. Submit FS Report; Section 5.7;	Within sixty (60) days from submittal of RI Report

15. Submit Public Participation Plan; Section 5.8; Submit and distribute Fact Sheets;	Within forty (40) days from the effective date of this Order. For projected or completed key milestones, as specified in Public Participation Plan or when requested by DTSC.
16. Submit Initial Study and Checklist; Section 5.9;	As requested by DTSC.
17. Submit Draft RAP; Section 5.10;	Within thirty (30) days after approval of FS Report.
18. Submit Responsive Summary; Section 5.10;	Within ten (10) days of closure of public comment period.
19. Submit Final RAP; Section 5.10;	Within fifteen (15) days of receipt of DTSC's comments.
20. Submit Remedial Design; Section 5.11;	Within sixty (60) days after DTSC's approval of the final RAP.
21. Deed Restrictions; Section 5.12;	Within ninety (90) days of approval of Final RAP.
22. Submit Implementation Report; Section 5.13;	Within thirty (30) days of completion of field activities.
23. Submit O&M Workplan; Section 5.14;	Within thirty (30) days of DTSC's request.
24. Submit Remedial Action Review Workplan; Section 5.15;	Within thirty (30) days before end of five-year period.
25. Submit Emergency Response Action Report; Section 5.18;	Within seven (7) days of an emergency response action.
26. Provide copies of sampling, data, and documentation; Section 6.12;	Within seven (7) days of receipt of DTSC's request.
27. Provide prior notice before conducting field sampling; Section 6.12;	Inform DTSC seven (7) days in advance of sampling.
28. Maintain central depository of data, reports, documentation; Section 6.13; and	Maintain central depository for a minimum of ten (10) years after conclusion of all activities conducted pursuant to this Order.
29. Provide prior written notice to DTSC before destroying any documentation prepared pursuant to this Order; Section 6.13.	At least six (6) months prior to destroying any documents.

6.26 Parties Bound. This Order applies to and is binding upon each Respondent and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations. Respondents shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work performed under this Order, within fifteen (15) days after the effective date of this Order or the date of retaining their services, whichever is later. Respondents shall condition any such contracts upon satisfactory compliance with this Order. Notwithstanding the terms of any contract, each Respondent is responsible for compliance with this Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Order.

6.27 Change in Ownership. No change in ownership or corporate or partnership status relating to the Site shall in any way alter any Respondent's responsibility under this Order. No conveyance of title, easement, or other interest in the Site, or a portion of the Site, shall affect any Respondent's obligations under this Order. Unless DTSC agrees that such obligations may be transferred to a third party, Respondents shall be responsible for and liable for any failure to carry out all activities required of Respondents by the terms and conditions of this Order, regardless of any Respondent's use of employees, agents, contractors, or consultants to perform any such tasks. Respondents shall provide a copy of this Order to any subsequent owners or successors before ownership rights or stock or assets in a corporate acquisition are transferred.

VII. NOTICE OF INTENT TO COMPLY

Not later than fifteen (15) days after the effective date of this Order, Respondents shall provide written notice, in accordance with paragraph 6.5 Submittals of this Order, stating whether or not Respondents will comply with the terms of this Order. If Respondents, or any one of them, do not unequivocally commit to perform all of the requirements of this Order, they, or each so refusing, shall be deemed to have violated this Order and to have failed or refused to comply with this Order. Respondents' written notice shall describe, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondents under Health and Safety Code sections 25358.3, subdivision (a) and 25355.5, subdivision (a)(1)(B) or CERCLA section 107(c)(3), 42 U.S.C. section 9607(c)(3).

VIII. EFFECTIVE DATE

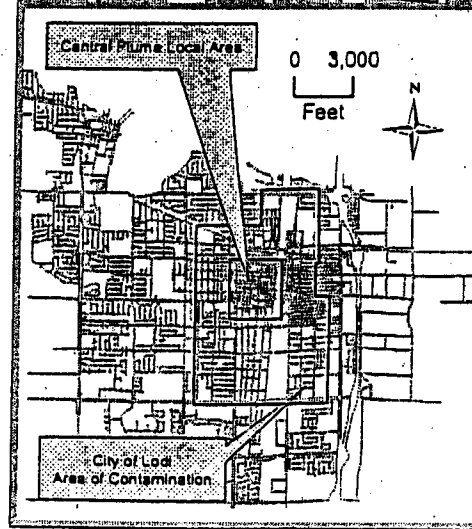
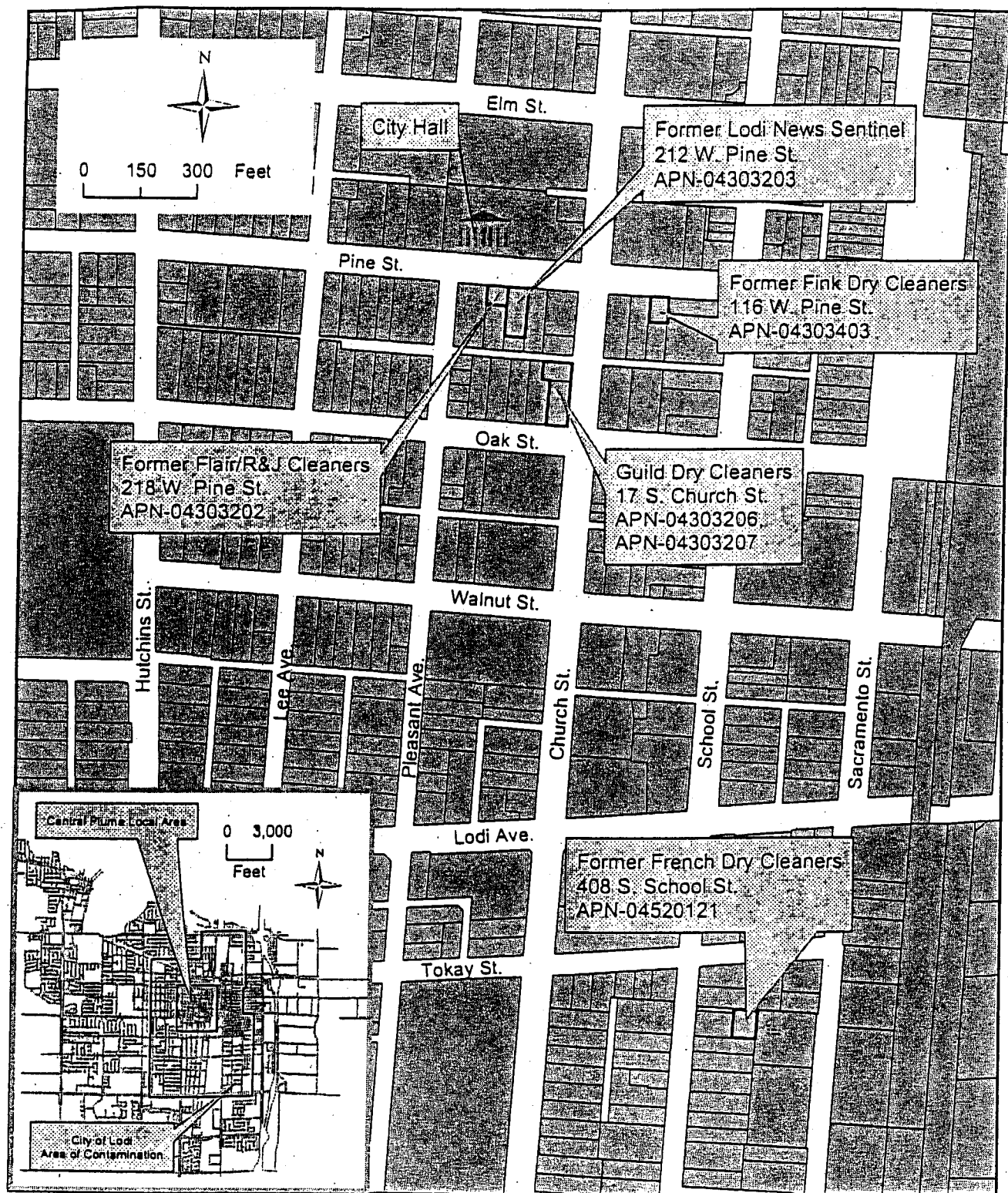
This Order is final and effective upon the date of issuance.

IX. PENALTIES FOR NONCOMPLIANCE

Each Respondent may be liable for penalties of up to \$25,000 for each day out of compliance with any term or condition set forth in this Order and for punitive damages up to three times the amount of any costs incurred by DTSC as a result of Respondents' failure to comply, pursuant to Health and Safety Code sections 25359, 25359.2, 25359.4, and 25367, subdivision (c). Health and Safety Code section 25359.4.5 provides that a responsible party, who complies with this Order, or with another order or agreement concerning the same response actions required by this Order, may seek treble damages from Respondents who fail or refuse to comply with this Order without sufficient cause.

DATE OF ISSUANCE May 30, 2003 Original signed by James L. Tjosvold
James L. Tjosvold, P.E., Chief
Northern California-Central
Cleanup Operations Branch
Site Mitigation and Brownfields Reuse Program
Department of Toxic Substances Control

cc: Site Mitigation and Brownfields Reuse Program
Headquarters, Planning & Policy
Office of Legal Counsel
Cost Recovery Unit



Selected Property
Address
Assessor's Parcel Number

City of Lodi Area of Contamination Central Plume Local Area Lodi, California Exhibit A

May 2003



DEPARTMENT OF TOXIC
SUBSTANCES CONTROL

Parcel data obtained from: City of Lodi
Property locations obtained from: Henshaw Associates
Produced using: ArcGIS
By: E&GSB-GSU/hcd